

Date: Wednesday, 4/4/2007 8:57:01 AM  
User: Kim Johnston

# Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: LEFT ARM WELDMENT
Job Number	: 31584		
Estimate Number	: 11871		
P.O. Number	: N/A	Part Number	: D33549
This Issue	: 4/4/2007	S.O. No.	: N/A
Prsht Rev.	: NC	Drawing Number	: D3354 REV.B
First Issue	: N/A	Project Number	: N/A
Previous Run	: 31304	Drawing Revision	: B
		Material	: N/A
		Due Date	: 4/11/2007
Written By	:	Qty:	3
Checked & Approved By	: <u>07.04.07</u>	Um:	Each
Comment	: est. rev. A 06.01.14 new issue EC rev B 07.03.23 rev B dewg ec		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M1020TR1250W219	Seamless Round Tubing
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Comment: Qty.: 0.2405 f(s)/Unit Total : 0.7214 f(s)

Seamless Round Tubing

AISI 1020 1.25" OD x .219" wall

batch: M 19343

DSP 07/04/07 (3)

2.0	LATHE CONV.	CONVENTIONAL LATHE
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Comment: CONVENTIONAL LATHE

1-Turn as per dwg D3354

2- Deburr

DSP 07/04/07 (3)

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE

1-Drill hole, mill flat & c'sink as per dwg D3354

2- Mill angle on end as per dwg D3354

3- Deburr

DSP 07/04/07 (3)

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

DSP 07/04/07 / J.J 07/04/07 (3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: P Date: 07/04/11  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 4/4/2007 8:57:01 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LEFT ARM WELDMENT

Job Number: 31584

Part Number: D33549

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SD 07.04.07

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

PC 7/4/10 (3)

7.0

QC21

FINAL INSPECTION/W/O RELEASE



(3)

Comment: FINAL INSPECTION/W/O RELEASE

SD 07/04/11

Job Completion



U 07.04.11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

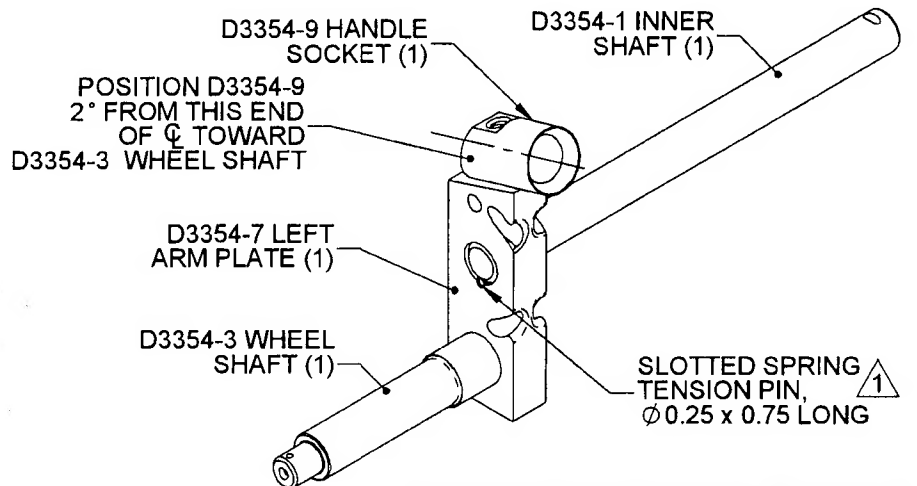
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

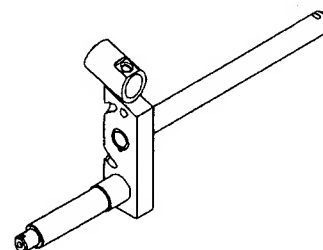


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CHECKED <i>h</i>	APPROVED <i>h</i>	DRAWING NO. <b>LEFT ARM WELDMENT</b>	REV. B SHEET 1 OF 7
DATE <b>07.02.02</b>	TITLE <b>D3354</b>	SCALE 1:4	
REV	DATE	DESCRIPTION	
A	04.12.13	NEW ISSUE	
B	07.02.02	REVISED DIMENSIONS	

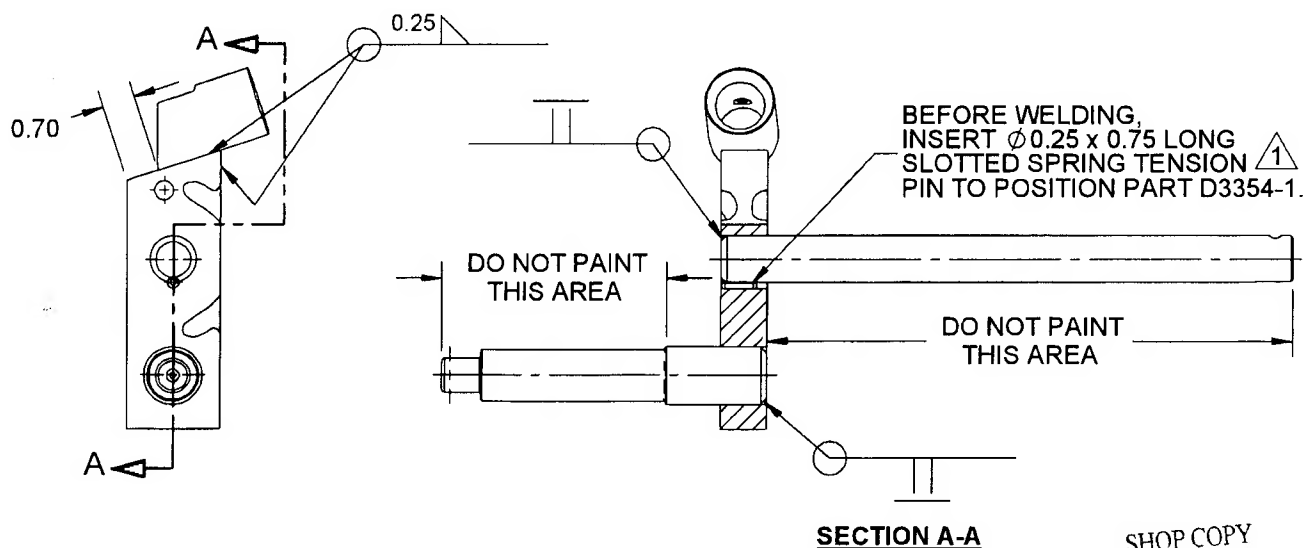
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*h* 07.02.02



**D3354-041 LEFT ARM WELDMENT**



**D3354-042 MIRROR ARM WELDMENT**



**NOTES:**

- 1) POSSIBLE SUPPLIER: SPAENAU, P/N TP-134
- 2) WELD PER DART QSI 004
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

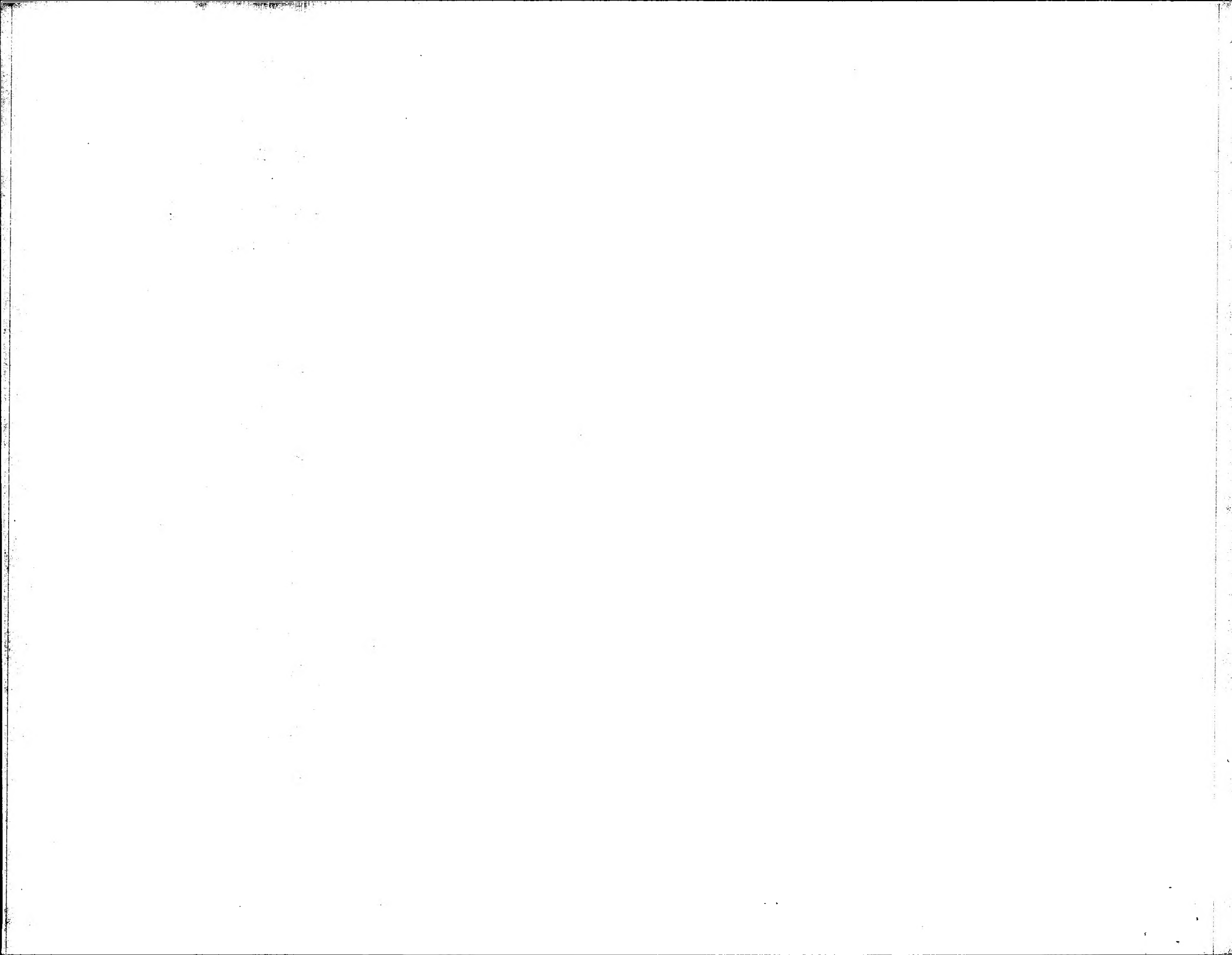
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WORK ORDER

31584

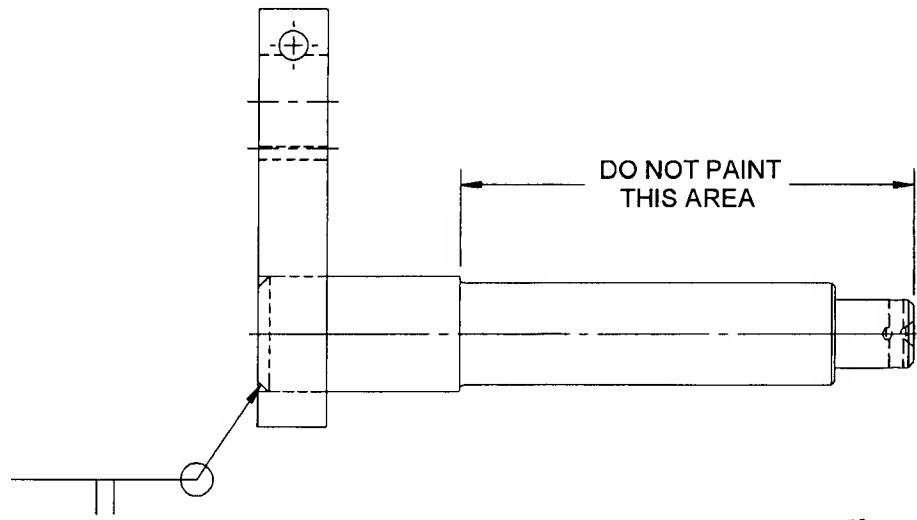
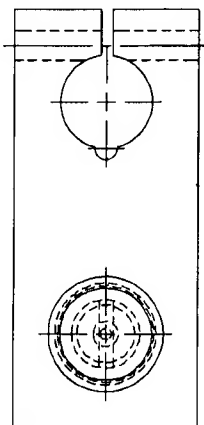
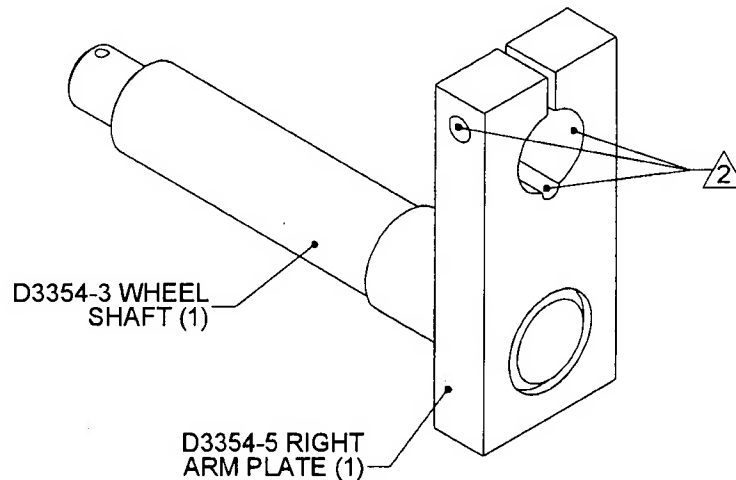
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DATE <b>07.02.02</b>		TITLE <b>LEFT ARM WELDMENT</b>	SCALE 1:2

**RELEASED**  
*[Stamp]* 07.02.02**D3354-043 RIGHT ARM WELDMENT****NOTES:**

- 1) WELD PER DART QSI 004
- 2) COVER INSIDE HOLES PRIOR PAINTING
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

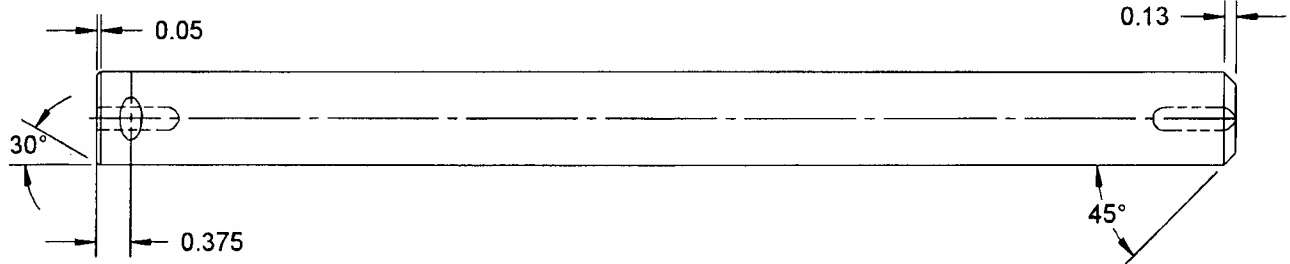
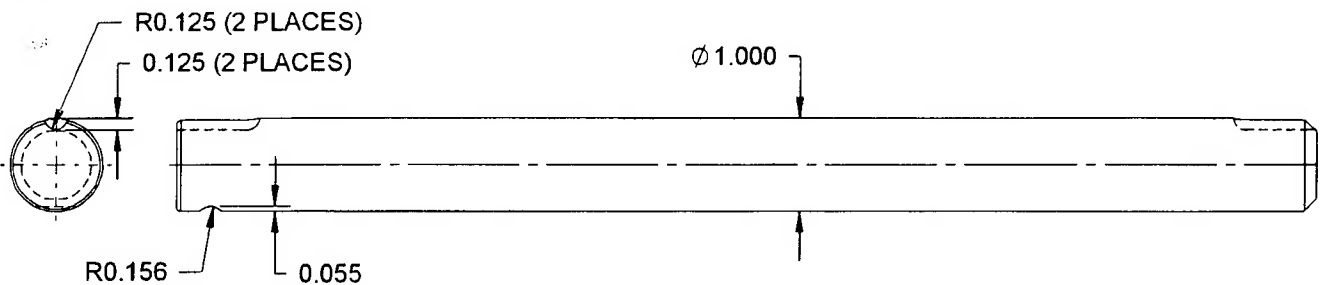
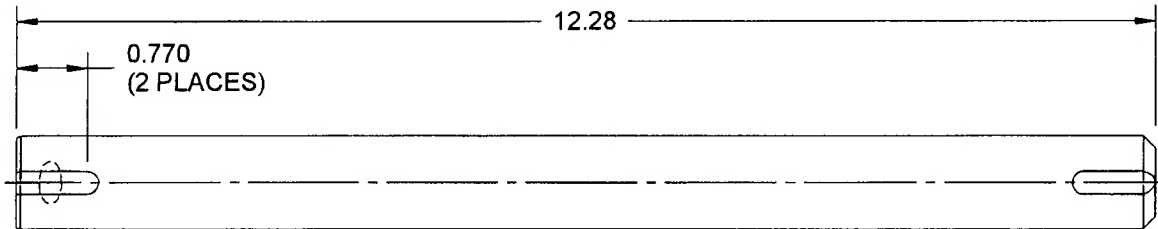
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*31584*

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DATE 07.02.02	TITLE LEFT ARM WELDMENT		SCALE 1:2

**RELEASED**  
*W 07.02.02***D3354-1 INNER SHAFT**

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**NOTES:**

- 1) MATERIAL: AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03 - GRADE-B7/ A29-03/ A322-91  
OR UNS#-G41400 ROUND BAR,  $\phi 1.250$  (REF. DART SPEC. M4140H-R)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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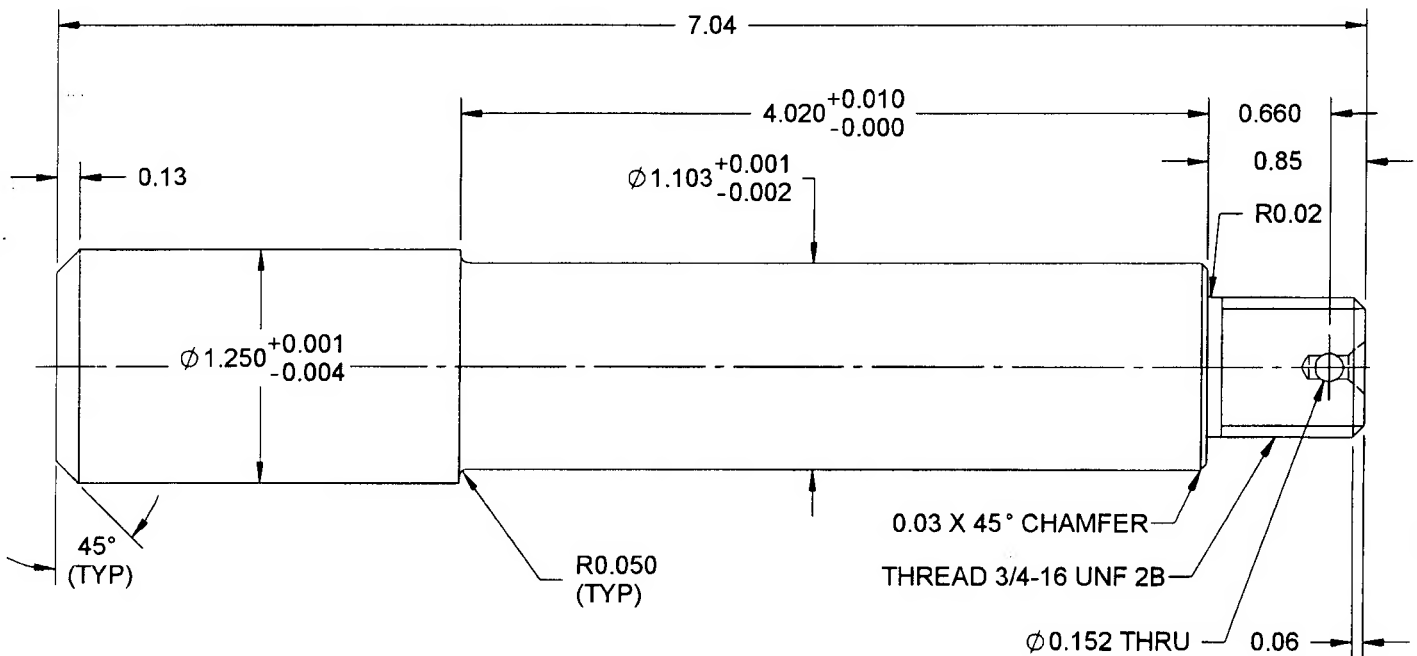
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DATE <b>07.02.02</b>		TITLE <b>LEFT ARM WELDMENT</b>	SCALE 1:1

**RELEASED**  
*07.02.02***D3354-3 WHEEL SHAFT****NOTES:**

- 1) MATERIAL: AISI-4130/ AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03 - GRADE-B7/ A29-03/ A322-91 OR UNS#-G41400 ROUND BAR,  $\phi 1.250$  (REF. DART SPEC. M4140H-R)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

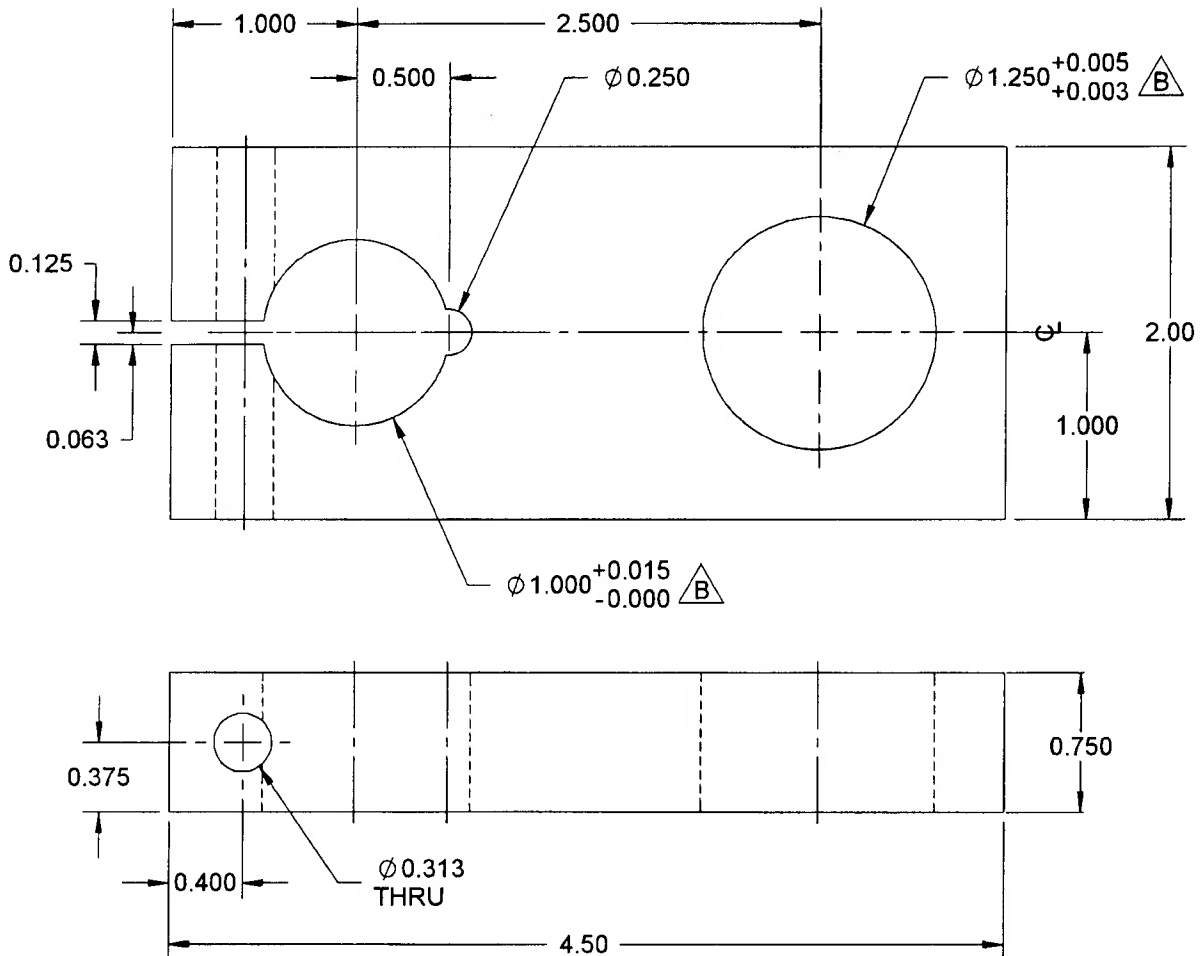
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DATE <b>07.02.02</b>		TITLE <b>LEFT ARM WELDMENT</b>	SCALE 1:1

**RELEASED**  
*wh 07.02.02***D3354-5 RIGHT ARM PLATE****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 0.75 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

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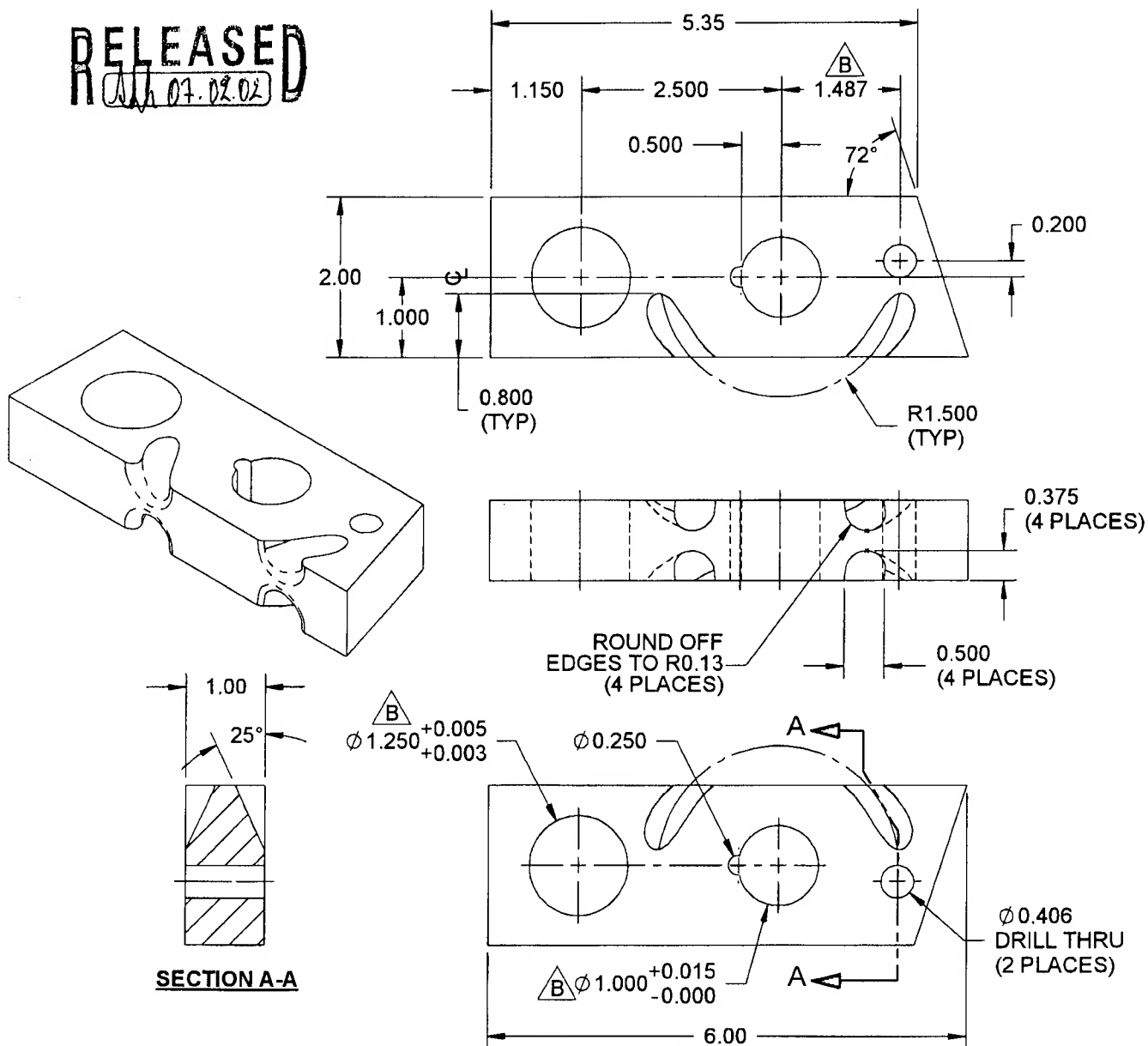
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DATE <b>07.02.02</b>		TITLE <b>LEFT ARM WELDMENT</b>	SCALE 1:2

**RELEASED**  
*07.02.02*



### D3354-7 LEFT ARM PLATE

#### NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 1.00 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

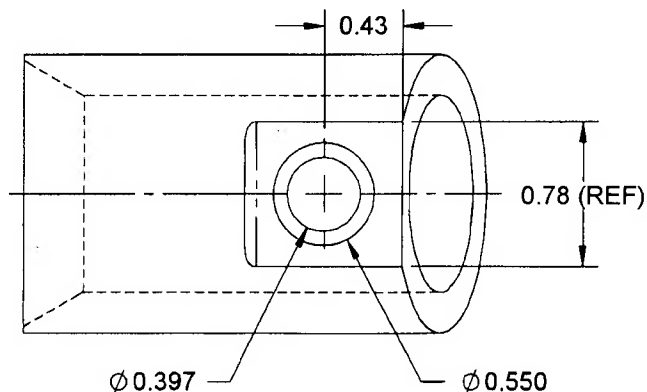
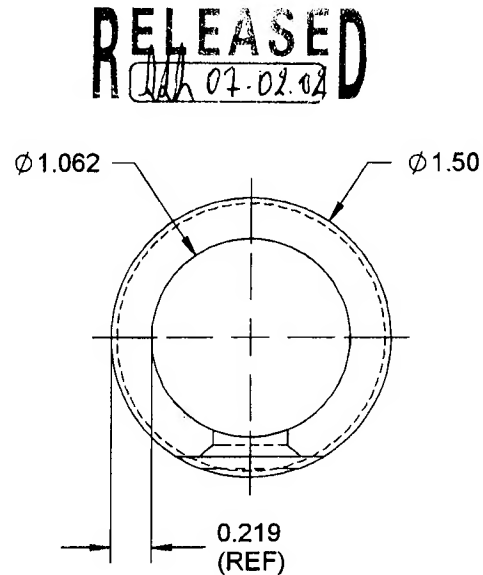
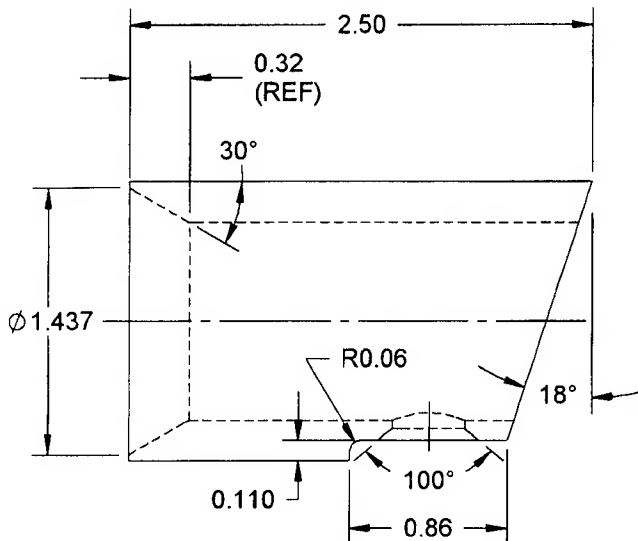
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DATE 07.02.02	TITLE LEFT ARM WELDMENT		SCALE 1:1

**D3354-9 HANDLE SOCKET****NOTES:**

- 1) MATERIAL: AISI 1010-1025 SEAMLESS ROUND TUBING PER MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077, (REF. DART SPEC. M1020TR1.250W.219)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

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DART AEROSPACE LTD		Work Order: 31584
Description: Left ARM Weldment		Part Number: D33549
Inspection Dwg:	Rev: B	Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.50	±0.030	1.503	✓			
1.062	±0.010	1.0600	✓			
0.219(REF)	±0.010	0.220	✓			
2.50	±0.030	2.500	✓			
0.32(REF)	±0.030	0.32	✓			
1.437	±0.010	1.440	✓			
30°	± 1/2°	30°	✓			
0.86	±0.030	0.862	✓			
0.110	±0.010	0.112	✓			
R0.06	±0.030	0.06	✓			
0.78(REF)	±0.030	0.800	✓			
<del>0.43</del> 0.43	±0.030	0.429	✓			
0.397	+0.006 -0.001	0.399	✓			
0.550	±0.010	0.560	✓			
100°	± 1/2°	100°	✓			
18°	± 1/2°	18°	✓			

Measured by: DSP	Audited by: J.B	Prototype Approval:
Date: 07/04/07	Date: 07/04/07	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

*Handwritten signature*